

METHOD FOR DYNAMICALLY MEASURING SUSPENSION IN- PLANE AND OUT-PLANE THERMAL DRIFT IN HARD DISK DRIVES

ABSTRACT OF THE DISCLOSURE

A method for dynamic in-situ characterization of in-plane and out-plane thermal drift of a hard disk drive head suspension is provided. A first data track is written. Amplitude and amplitude modulation of the write data signal are measured and track center is determined. Data tracks are then written for a selected time period. Amplitude and amplitude modulation of the write data signal is measured and a new track center of a last data track is determined. Any difference between the track center of the first data track and the track center of the last data track represents in-plane drift. The amplitude and amplitude modulation of the two write data signals is compared and any difference between the measured values is proportional to out-plane drift.